

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A processing system including at least ~~two~~
~~electronic units~~ of a first electronic unit and a second electronic unit,
the first electronic unit operating according to a first operation program,
comprising:
first storing means for storing the first operating program; and
first retrieving means for retrieving, from an external unit, a first rewrite program
for rewriting the first operation program stored in the first storing means,
wherein the first electronic unit newly retrieves, from the external unit, a first
operation program by executing the first rewrite program retrieved by the first retrieving
means to rewrite the first operation program stored in the first storing means using the
newly retrieved first operation program,
the second electronic unit operating according to a second operation program,
comprising:
second storing means for storing the second operating program; and
second retrieving means for retrieving, through the first electronic unit, a second
rewrite program for rewriting the second operation program stored in the second storing
means,
wherein the second electronic unit newly retrieves, through the first electronic
unit, a second operation program by executing the second rewrite program retrieved by
the second retrieving means to rewrite the second operation program stored in the second

storing means using the newly retrieved second operation program,

wherein the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit, and

wherein, when the first electronic unit ~~retrieves~~receives, from the external unit, a rewrite request for rewriting the second operation program, the first electronic unit executes the transfer routine to transfer the second rewrite program to the second retrieving means of the second electronic unit.

2. (currently amended) The processing system of claim 1,

wherein, when the external unit rewrites the first and second operating programs, the external unit outputs the second rewrite program to the first electronic ~~program-unit~~ and then outputs the second operation program after the external unit rewrites the first operating program by the first rewrite program.

3. (original) The processing system of claim 1,

wherein the first storing means includes a first nonvolatile memory for storing the first operating program and a first memory for storing the first rewrite program, while the second storing means includes a second nonvolatile memory for storing the second operating program and a second memory for storing the second rewrite program.

4. (new) A processing system including at least a first electronic unit and a second electronic unit,

the first electronic unit operating according to a first operation program,

comprising:

a first memory for storing the first operating program; and
first retrieving circuitry for retrieving, from an external unit, a first rewrite program for rewriting the first operation program stored in the first memory,
wherein the first electronic unit newly retrieves, from the external unit, a first operation program by executing the first rewrite program retrieved by the first retrieving circuitry to rewrite the first operation program stored in the first memory using the newly retrieved first operation program,

the second electronic unit operating according to a second operation program,
comprising:

a second memory for storing the second operating program; and
second retrieving circuitry for retrieving, through the first electronic unit, a second rewrite program for rewriting the second operation program stored in the second memory,

wherein the second electronic unit newly retrieves, through the first electronic unit, a second operation program by executing the second rewrite program retrieved by the second retrieving circuitry to rewrite the second operation program stored in the second memory using the newly retrieved second operation program,

wherein the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit, and

wherein, when the first electronic unit receives, from the external unit, a rewrite request for rewriting the second operation program, the first electronic unit executes the transfer routine to transfer the second rewrite program to the second retrieving circuitry

of the second electronic unit by bypassing the first retrieving circuitry of the first electronic unit.

5. (new) The processing system of claim 4,

wherein, when the external unit rewrites the first and second operating programs, the external unit outputs the second rewrite program to the first electronic unit and then outputs the second operation program after the external unit rewrites the first operating program by the first rewrite program.

6. (new) The processing system of claim 4,

wherein the first memory includes a first nonvolatile memory for storing the first operating program and a memory for storing the first rewrite program, while the second memory includes a second nonvolatile memory for storing the second operating program and a memory for storing the second rewrite program.

7. (new) A processing system including at least a first electronic unit and a second electronic unit,

the first electronic unit operating according to a first operation program, comprising:

a first memory for storing the first operating program; and

first retrieving circuitry for retrieving, from an external unit, a first rewrite program for rewriting the first operation program stored in the first memory,

wherein the first electronic unit newly retrieves, from the external unit, a first

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operation program by executing the first rewrite program retrieved by the first retrieving circuitry to rewrite the first operation program stored in the first memory using the newly retrieved first operation program,

the second electronic unit operating according to a second operation program, comprising:

a second memory for storing the second operating program; and

second retrieving circuitry for retrieving, through the first electronic unit, a second rewrite program for rewriting the second operation program stored in the second memory,

wherein the second electronic unit newly retrieves, through the first electronic unit, a second operation program by executing the second rewrite program retrieved by the second retrieving circuitry to rewrite the second operation program stored in the second memory using the newly retrieved second operation program,

wherein the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit, and

wherein, when the first electronic unit receives, from the external unit, a rewrite request for rewriting the second operation program, the first electronic unit executes the transfer routine to transfer the second rewrite program to the second retrieving circuitry of the second electronic unit without using the first retrieving circuitry.

8. (new) The processing system of claim 7,

wherein, when the external unit rewrites the first and second operating programs, the external unit outputs the second rewrite program to the first electronic unit and then

outputs the second operation program after the external unit rewrites the first operating program by the first rewrite program.

9. (new) The processing system of claim 7,

wherein the first memory includes a first nonvolatile memory for storing the first operating program and a memory for storing the first rewrite program, while the second memory includes a second nonvolatile memory for storing the second operating program and a memory for storing the second rewrite program.

10. (new) A method of controlling a processing system having at least a first electronic unit and a second electronic unit, the method comprising:

storing a first operating program of the first electronic unit;

retrieving, from an external unit, a first rewrite program for rewriting the stored first operation program, by executing a boot program of the first electronic unit;

newly retrieving, from the external unit, a first operation program by executing the retrieved first rewrite program to rewrite the stored first operation program using the newly retrieved first operation program;

storing a second operating program;

retrieving, through the first electronic unit, a second rewrite program for rewriting the stored second operation program; and

newly retrieving, through the first electronic unit, a second operation program by executing the second retrieved rewrite program to rewrite the stored second operation program using the newly retrieved second operation program;

wherein the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit; and

when the first electronic unit receives, from the external unit, a rewrite request for rewriting the second operation program, the first electronic unit executes the transfer routine to transfer the second rewrite program to the second electronic unit.

11. (new) The method of claim 10,

wherein, when the external unit rewrites the first and second operating programs, the external unit outputs the second rewrite program to the first electronic unit and then outputs the second operation program after the external unit rewrites the first operating program by the first rewrite program.

12. (new) A method of controlling a processing system having at least a first electronic unit and a second electronic unit, the method comprising:

storing a first operating program of the first electronic unit;

retrieving, from an external unit, a first rewrite program for rewriting the stored first operation program, by executing a boot program of the first electronic unit;

newly retrieving, from the external unit, a first operation program by executing the retrieved first rewrite program to rewrite the stored first operation program using the newly retrieved first operation program;

storing a second operating program;

retrieving, through the first electronic unit, a second rewrite program for rewriting the stored second operation program; and

newly retrieving, through the first electronic unit, a second operation program by executing the second retrieved rewrite program to rewrite the stored second operation program using the newly retrieved second operation program;

wherein the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit; and

when the first electronic unit receives, from the external unit, a rewrite request for rewriting the second operation program, the first electronic unit executes the transfer routine to transfer the second rewrite program to the second electronic unit by bypassing the boot program of the first electronic unit.

13. (new) The method of claim 12,

wherein, when the external unit rewrites the first and second operating programs, the external unit outputs the second rewrite program to the first electronic unit and then outputs the second operation program after the external unit rewrites the first operating program by the first rewrite program.

14. (new) A method of controlling a processing system having at least a first electronic unit and a second electronic unit, the method comprising:

storing a first operating program of the first electronic unit;

retrieving, from an external unit, a first rewrite program for rewriting the stored first operation program, by executing a boot program of the first electronic unit;

newly retrieving, from the external unit, a first operation program by executing the retrieved first rewrite program to rewrite the stored first operation program using the

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newly retrieved first operation program;

storing a second operating program;

retrieving, through the first electronic unit, a second rewrite program for rewriting the stored second operation program; and

newly retrieving, through the first electronic unit, a second operation program by executing the second retrieved rewrite program to rewrite the stored second operation program using the newly retrieved second operation program;

wherein the first rewrite program includes a transfer routine for transferring the second rewrite program to the second electronic unit; and

when the first electronic unit receives, from the external unit, a rewrite request for rewriting the second operation program, the first electronic unit executes the transfer routine to transfer the second rewrite program to the second electronic unit without execution by the boot program of the first electronic unit.

15. (new) The method of claim 14,

wherein, when the external unit rewrites the first and second operating programs, the external unit outputs the second rewrite program to the first electronic unit and then outputs the second operation program after the external unit rewrites the first operating program by the first rewrite program.